

### **REMARKS**

Claims 1 - 20 remain pending. The rejections set forth in the Office Action are respectfully traversed below.

#### **The Abstract**

The Office Action objected to the Abstract for exceeding the limitations of 150 words. An amended Abstract was provided above.

#### **Rejections under 35 USC 102**

Claims 1-20 remain rejected under 35 USC §102 over **Davis** (USP 6,181,803). At item 4 on pages 10-11 of the Office Action, the Examiner appears to have interpreted claim features broadly to read on the disclosures of **Davis**. The independent claims were amended to clarify that the “additional authentication information” is “different from the input biometric information.”

In contrast, the Office Action appears to read the additional authentication information on the “biometric characteristics (that is more than one characteristic being captured) of the requesting user (step 420).” The Office Action further stated that “one or more frames, that is, additional authentication information after the biometric information has provided, of digital data corresponding that characteristic.”

These statements appear to reflect an unreasonably broad interpretation of “additional authentication information” to read on a portion of the *same* biometric characteristic that is input. As emphasized in the remarks of the Amendment dated April 30, 2004, even though **Davis**

discloses both visual and non-visual characteristics, only *one* type of characteristic is input. To the extent that the Examiner in interpreting “additional authentication information” to read on the plurality of frames of digital data that are collectively referred to as a “data clip” in **Davis**, it should be noted that all the frames of the digital data collectively referred to as a “data clip” pertain to the *one and only one* biometric characteristic that is input according to **Davis**.

As amended, the present independent claims clarify that the additional authentication information is “different from the input biometric information.” The present claimed invention clarifies that there are two *different* types of authentication information (one being the input biometric information, and second being the additional authentication information that is different from the previously input biometric information). **Davis** does not at all disclose using any *combination* of two *different* authentication parameters. For at least these reasons, the present claimed invention patentably distinguishes over the prior art.

In addition, the independent claims of the present invention recite a “determination unit” or a “generation unit” (and corresponding method step) that takes advantage of the *combination* of matching check data related to *both* biometric feature information, as well as, *additional* authentication information, that is different from the biometric feature information. Such features are not all addressed in the cited prior art. For at least further reasons, the presently claimed invention patentably distinguishes over the prior art.

The Office Action also alleged that “in fact, applicant does not even address any estimation of the matching precision in the claimed language.” This is incorrect. For instance, the present claimed invention recites an estimation unit “estimating match precision of the extracted biometric feature information.” For this claimed feature, the Office Action referred to

the disclosures in **Davis** pertaining to locally tailoring the “data clip” related to the biometric data before analyzing the data for authentication. However, as emphasized before, the local tailoring of the “data clip” pertains to enhancing the biometric information by computationally extrapolating information from multiple samples, or cropping to exclude unnecessary data (col. 5, lines 4-21, and col. 6, lines 58-67). Such custom tailoring of the biometric data clip according to **Davis** does not correspond to any “estimation” of the matching precision for the extracted biometric feature information, as recited in the presently claimed invention.

The estimated matching precision determines whether a predetermined matching precision is obtainable or not. It is when a predetermined matching precision cannot be obtained that additional authentication information is used. As recited in the present claimed invention, the additional authentication information is input “when said estimation unit estimates that a predetermined matching precision cannot be obtained.” The disclosures regarding tailoring of the biometric “data clip” in **Davis** does not all correspond to this claimed feature.

Indeed, one feature of the present invention is to estimate the matching precision level without/before conducting a matching process (see, e.g., new claim 21, as supported, for example, at page 20, line 16 et seq.). The present invention estimates the matching precision level based on the quality of an available data set representing a biometric character and on the reproducibility of the biometric feature (see, e.g., new claims 22 and 23, as supported, for example, at page 20, line 10, and page 24, line 6). **Davis** does not disclose these features.

Furthermore, the Office Action does not even address the *sequence* of requesting input of additional authentication information *after* biometric information is provided. The mere disclosure in **Davis** for different types of biometric information (e.g. visual and non-visual) does

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not at all address the present claimed request for input of additional authentication information *after* biometric information is input. The further reference to multiple frames of digital data corresponding to a single biometric feature has nothing to do with the presently claimed *second* request for input of additional authentication information. Once a selected type of biometric characteristic is requested for input in **Davis**, there is no further teaching or suggestion for any *secondary* request for input of any additional authentication information in **Davis**. For at least these further reasons, the presently claimed information patentably distinguishes over the prior art.

If, for any reason, it is felt that this application is not now in condition for allowance, or if the Examiner wishes additional explanations of the present invention, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that any fees are due in connection with the filing of this paper, please charge any fees to Deposit Account No. 50-2866.

Respectfully submitted,

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